Serial No.: 10/542,570

Attv. Doc. No.: 2003P00655WOUS

## Amendments to the Claims:

The text of all pending claims, (including withdrawn claims) is set forth below. Canceled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with <u>underlining</u> and deleted text with <u>strikethrough</u>. The status of each claim is indicated with one of (original), (currently amended), (canceled), (withdrawn), (new), (previously presented), or (not entered).

Applicant reserves the right to pursue any canceled claims at a later date.

The following listing of claims will replace all prior versions, and listings, of claims in the application:

## 1. - 4. (canceled)

5. (currently amended) A device for diagnosing obstructions in <u>at least one</u> channel[[s]] of a micro heat exchanger <u>including a plurality of channels</u>, comprising:

at least one temperature sensor arranged on an outside of the micro heat exchanger; and an evaluation unit connected to the at least one temperature sensor, wherein

the evaluation unit diagnoses an obstruction in the at least one channel on the basis of changes of a measured temperature by the temperature sensor, wherein

 $\underline{an} \ entry \ parameter[[s]] \ of \ \underline{a} \ fluid[[s]] \ involved \ in \ \underline{a} \ [[the]] \ heat \ exchange \ \underline{of \ the \ micro} \ heat \ exchanger \ is are \ unchanged.$ 

- (previously presented) The device according claim 5, wherein the device is a detachable arrangement.
- (previously presented) The device according claim 5, wherein the outside is an outer surface of the micro heat exchanger.

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8. (currently amended) The device according to claim 5, further comprising: a closed-loop control device connected to the at least one temperature sensor, wherein the closed-loop control device regulates a mass flow of the fluid[[s]] involved in the heat exchange in the sense of keeping such that the measured temperature is constant, and wherein

the closed-loop control device diagnoses an obstruction in the at least one channel on the basis of changes in the mass flow.

9.-10. (canceled)

(currently amended) A method for diagnosing obstructions in <u>at least one</u>
 channel[[s]] of a micro heat exchanger <u>including a plurality of channels</u>, comprising:

measuring a temperature of the micro heat exchanger at an outside of the micro heat exchanger, and

diagnosing an obstruction in the at least one channel on the basis of changes of the measured temperature, wherein an entry parameter[[s]] of a [[the]] fluid[[s]] involved in a heat [[the]] exchange of the micro heat exchanger remains unchanged.

- (previously presented) The method according claim 11, wherein the measuring of
  the temperature is accomplished at at least one a point on the outside of the micro heat exchanger
  by a temperature sensor.
- (previously presented) The method according claim 11, wherein the outside is an outer surface of the micro heat exchanger.
- 14. (currently amended) The method according to claim 11, further comprising: regulating a mass flow of ene-of-the fluid[[s]] involved in the heat exchange such that the measured temperature is constant; and

diagnosing an obstruction in the at least one channel on the basis of changes of the mass flow.

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- 15. (canceled)
- (previously presented) The method according claim 14, wherein more than one mass flows are regulated.
  - 17. (canceled)